

## Abstract

The invention relates to a cyclical time-based communication system (1), for the transmission of useful data (DATA) between users (3) of the system (1). Said system (1) comprises a databus (2) and users (3) connected thereto. The data transmission occurs within cyclical repeating timeframes (4), each with at least two timeslots (5). Each timeslot (5) is provided for the transmission of a message (Ni). A message (Ni) comprises at least part of the useful data (DATA) and each message (Ni) is provided with a code (ID). Accordingly to the invention, the bandwidth available for data transmission may be better utilised, whereby the code (ID) is placed within the message (Ni) as a part thereof, each message (Ni) is additionally provided with time information concerning the timeslot (5) which may be extracted from the code and at least one of the timeslots (5) within the timeframes (4) may be used for transmission of various messages in various cycles. According to a preferred embodiment of the invention the information relating to the current cycle comprises an ordinal number for the cycle. In the simplest case the number has two values 0 and 1. Even and odd cycles can thus be differentiated. The ordinal number may be increased to differentiate more cycles from each other. The transmission method is preferably based on the FlexRay protocol.